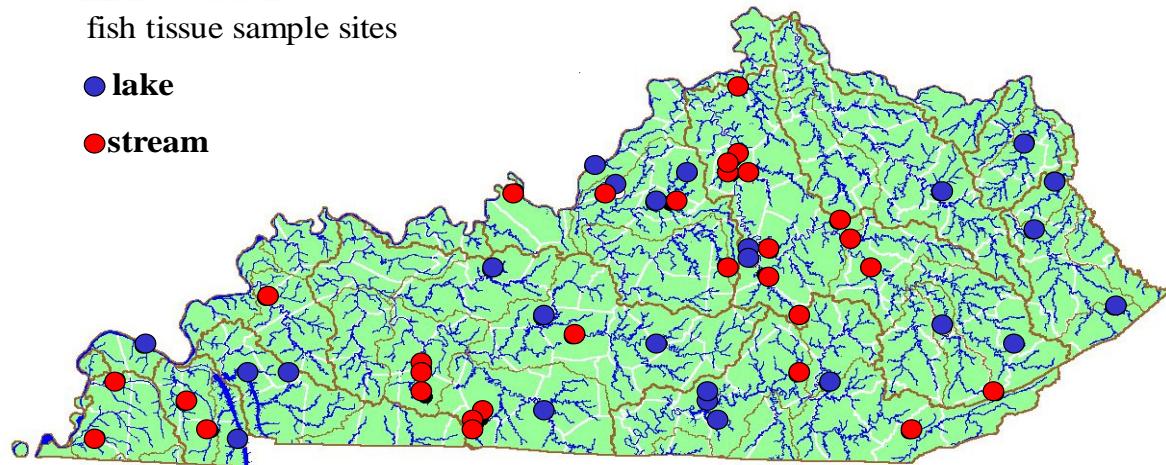


EQC ENVIRONMENTAL INDICATOR PROGRAM

Reporting on environmental trends and conditions in Kentucky

Sites with Elevated Levels of Mercury in Fish Tissue* (1995-2001)



* Above 0.1 mg/Kg in fish tissue. Source: Kentucky Division of Water

Mercury in Fish Tissue in Kentucky

The Kentucky Division of Water has been analyzing fish tissue data for mercury since 1995. During the past 8 years, 157 samples taken in 27 lakes and 126 samples collected from 48 streams and rivers have been assessed. The data shows that elevated mercury levels in fish are scattered across the state. Of the 27 lakes sampled, 66 percent (18 lakes) had median fish methylmercury levels within the Food and Drug Administration FDA consumption advisory limit and 30 percent (8 lakes), including Lake Cumberland, had maximum levels above the U.S. EPA maximum advisable concentrations.

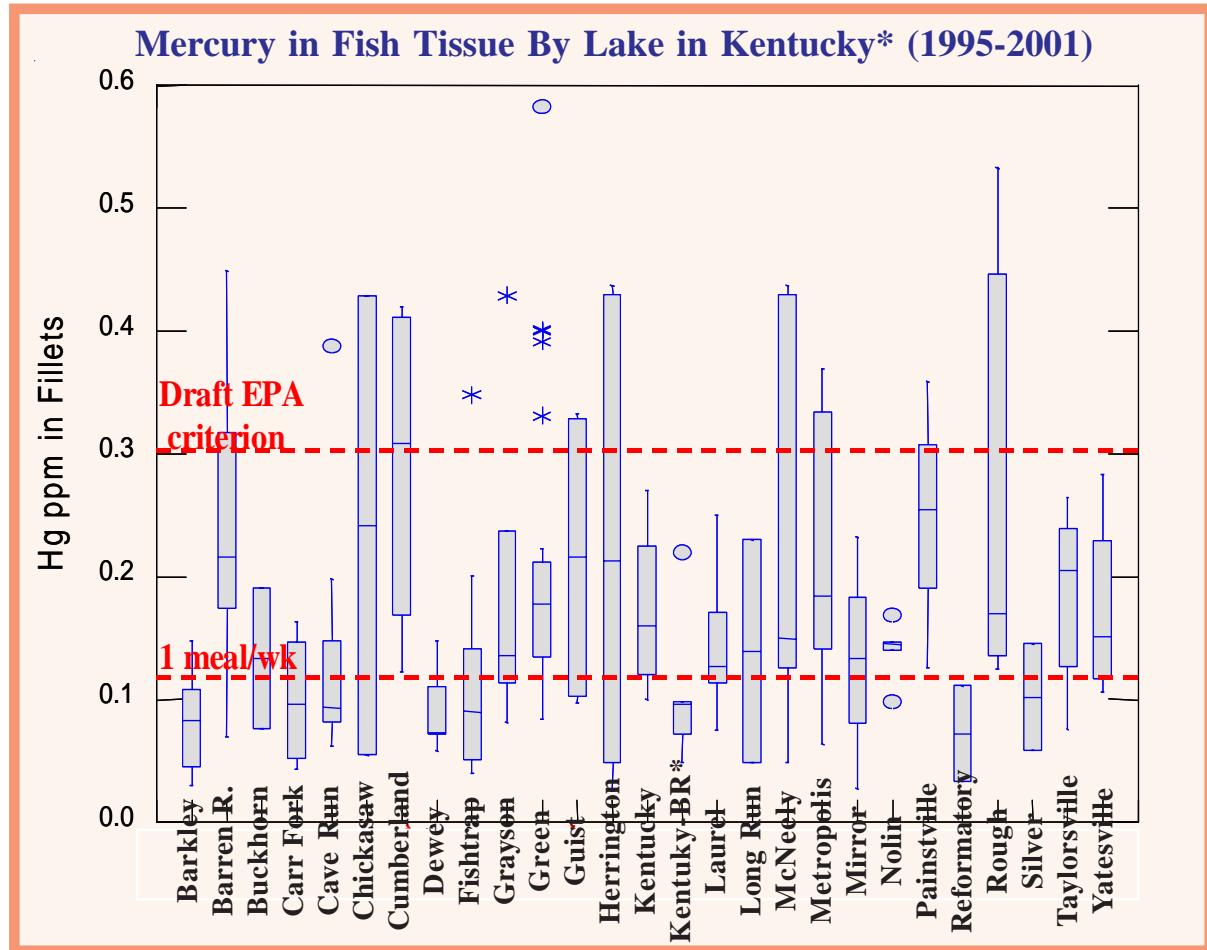
For most people, the risk from mercury by eating fish and shellfish is not a health concern. Yet, some fish and shellfish contain higher levels of mercury that may harm an unborn baby or young child's developing nervous system. The risks from mercury in fish and shellfish depend on the amount of fish and shellfish eaten and the levels of mercury in the fish and shellfish. Therefore, the FDA and the Environmental Protection Agency (EPA) are advising women who may become pregnant, pregnant women, nursing mothers, and young children to avoid some types of fish and eat fish and shellfish that are lower in mercury.

When pregnant women consume contaminated fish, the mercury passes through the placental barrier to affect the developing fetus.¹ For this reason, women of childbearing age are encouraged to be especially careful to follow consumption advice, even if they are not pregnant since it builds up in the body. In addition, nursing mothers can pass methylmercury to their child through breast milk. According to the Centers for Disease Control, about 5 percent of women of childbearing age in the U.S. have levels of mercury in their blood at or exceeding the safety level for fetal exposure.² An additional 5 percent were just below the threshold. The National Research Council issued a report estimating that as many as 60,000 U.S. newborns a year are now at risk for adverse neurodevelopmental effects from dietary mercury.³

Forty-six states have issued fish consumption advisories.⁴ Almost 75 percent of the advisories have been issued at least in part because of mercury contamination. Approximately 95,000 lakes and 544,000 river miles are under advisory as well as all the Great Lakes and their connecting waters.⁵ Kentucky is one of 15 states that have issued a statewide fish consumption advisory due to unsafe levels of mercury, which has been in effect since 2000.

EQC ENVIRONMENTAL INDICATOR PROGRAM

Reporting on environmental trends and conditions in Kentucky



*Kentucky Lake-Blood River embayment. Note: 1 meal week - FDA fish consumption advisories level for mercury. Draft EPA criterion level for the maximum advisable concentration of methylmercury in fish and shellfish tissue to protect the general population. *Levels of mercury in lake fish in Kentucky as tested by the Division of Water. The data is presented by lake for the maximum, median and minimum mercury values detected in fish tissue. Source: Division of Water

Footnotes

1. Mercury Study Report to Congress, 1997. U.S. Environmental Protection Agency. <http://www.epa.gov/oar/mercury.html>
2. U.S. Environmental Protection Agency. http://www.epa.gov/newsroom/headline_022403.htm
3. National Academy of Sciences. <http://www.nap.edu/books/0309071402/html/>.
4. EPA, Fish Consumption Advisories. <http://www.epa.gov/ost/fish/>.
5. Cincinnati Enquirer. Report puts Kentucky/Ohio high on mercury list. June 14, 2003. http://www.enquirer.com/editions/2003/06/14/loc_mercury14.html